MAUGHS (G. M. B.)

CASE OF OVARIAN PREGNANCY.*

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At the meeting of this Society, April 13th, Dr. C. exhibited what he claimed was an ovarian pregnancy, which he had removed by laparotomy a few days previous. Knowing that if correct in his diagnosis he was in possession of the most valuable pathological specimen in the world, and that this Society, through this particular find of a rosetta stone by one of its most worthy members, would be able to do what all the pathological museums in the world failed in doing—determine the possibility of ovarian pregnancy—and myself believing that such a thing had never happened—never would, never could happen—I eagerly proceeded to examine it.

The tumor, much the size, shape and general appearance of a gravid uterus of a few weeks, had been laid open longitudinally, and its walls further exposed by a cross-incision at the lower portion of the cavity containing the ovum. The walls, composed of peritoneum, muscular and mucous tissue, with blood extravasations, were of a pretty uniform thickness of half an inch, with a uterine-shaped cavity at the upper or fundal end, of what appeared to be the corpus uteri. This cavity, containing an embryo of eight or ten weeks, was smoothly lined, as in normal pregnancy, with the amnion, which terminated at the lower end of this cavity, at a constriction in the walls, which I thought was the os internum, Below this, in the narrow end of the tumor, was an unlined cavity, extending from the os internum to the terminal end of the tumor, and was, perhaps, three-quarters of an inch in length. The sac containing the embryo had been laid open, previous to which it must have been as large as a hen's egg. The attachments of the tumor had been cut off so close that it was difficult to determine their nature. But one fallopian tube could be distinctly made out; and which, as I subsequently determined by a more careful examination, entered the tumor at one of its angles, just behind the upper lateral margin

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of the half-formed placenta. There was every appearance of a fallopian tube at the opposite angle of the pear-shaped body, but this was cut so close that, with the presence of a blood infarction in this horn, and without a more minute examination than I was able to give it, I am unable to say was a tube, or the undeveloped horn of a uterus bicornis.

This was the general appearance of the tumor upon a careful examination, as I held it in my hand. Of course, it was not such an examination as I would have made under other circumstances. I, however, satisfied myself that it was not an ovarian or tubal pregnancy, and unhesitatingly declared it was a uterus—a conviction which I still hold—not a pregnant ovary, but a pregnant uterus, and so stating, asked Dr. C. what had become of the woman. He said she was not doing well. I told him she would most probably do worse—would die; if so, he must not fail to make a post-mortem, as this was her uterus. She died next morning—no post-mortem, which, under the urgent occasion, is not less wonderful than unfortunate, as it would have proven to this Society the truth or error of my diagnosis and statements; and as by the presentation of this case, this Society had become an interested party, it was certainly due it that the ordinary means—under said circumstances—of determining truth should have been used. For what other purpose is this Society? Is it only for the purpose of hearing crude opinions, or reports of cases, regardless of the truth or error of the reporter's views, and to send them out to the profession with at least the tacit endorsement of the Society, that we meet here once a week? And then a post-mortem in this case would have given us the key to a clinical history not less mystical than the tumor itself. I may say here, that these opinions and expressions of mine that it was a uterus were concurred in by several leading members of the Society; and at least one of these, Dr. Coles, an experienced and learned obstetrician and gynæcologist, said openly that it was a uterus.

Anxious to get at the truth of this case—both for our own satisfaction and in the cause of science; a not unnatural desire, it will be admitted, on the part of one who for twenty years has been professor of obstetrics and gynæcology in a most reputable institution (the Missouri Medical College): had I felt indifferent

to such a case, I most certainly would feel unworthy to teach obstetrics or gynæcology—as soon as I could, on the following Tuesday, I went out to the hospital, hoping to find Dr. C. and thinking probably I might witness the post-mortem, which it never occurred to me, in case of death, would not be held. Not finding Dr. C. but learning that his office was on Jefferson avenue, I went to his office to see him and the tumor, when he told me Dr. Bremer had the tumor for microscopic examination, but kindly gave me the privilege of examining it. I went to Dr. Bremer's college laboratory; not finding him in, I went to his house, when he told me he had not yet examined the tumor, was preparing specimens for the microscope. I now made an appointment for the next day with Dr. Engelmann, who is thought to know a uterus when he sees and handles it. Next day, on my way to the college, according to appointment, I met Dr. Bremer on the cars, who told me that he had to attend court, but kindly told me where in his laboratory I would find the tumor. I met Dr. Engelman and told him Dr. Bremer would not be present. This we regretted, and did not give the tumor as thorough an examination as we had intended, and would have done had Dr. Bremer or Dr. C. been present. The tumor was now much contracted and altered in general appearance by having been in alcohol several days, but we fully confirmed the description I have given, and in addition, in carefully examining the surface with a lens I had taken with me, we entirely failed to detect any scars or cicatrices from ruptured follicles, corpus luteus, or find any ovarian stroma or ova in the cut walls; and further, with the lens we could see in the lower unlined cavity an arrangement of its mucous membrane much like that of the arbor vitæ of the cervix uteri, which, with the shape, size and anatomy of the organ, or tumor, satisfied us that it was what I had stated it to be, a pregnant uterus. We, however, in the absence of those to whom the tumor had been entrusted, did not feel authorized to make such an examination as might have demonstrated this—indeed, were unwilling to handle it as we wished to do. Then, for positive proofs of what it is, we are thrown upon other resources.

Is it a uterus? To answer this question in the affirmative, as we expect to do, to the satisfaction of this Society, it may be well first to show what it is not.

CLINICAL HISTORY.

The patient had had several attacks of what was diagnosed pelvic peritonitis—pain, fainting, cramps, irregular menstruation, hemorrhage—with the passage of a large membraneous blood-clot two inches long by one inch broad. On introducing the finger into the vagina, a closed sac was found. Upon exploring this two and a half inches (this, starting with a vagina of, say three inches, gives us five and a half inches), its external orifice was found very narrow and cicatrical. (What are we to understand by external orifice here, its opening into the vagina, or external to this?) Upon a further exploration of the vagina or sac, an inch and a half further (this gives us seven inches), a depression was felt, which the speculum showed was penetrated at bottom. A probe passed into this an inch (we are now eight inches from the mouth of the vagina), the finger in the rectum detected a uterus not larger than the thumb, with a cervix like the finger. (Now, mount this uterus the size of the thumb, with its cervix as long as the finger, on the eight inches given, and we have climbed well up to the woman's chin.) To the right, a large tumor the size of an orange was felt. Diagnosis, abnormal development of vagina, uterus, etc., with abscess. (A tremendous diagnosis!) At a later visit, this second horn or cavity of the vagina was dilated and found one inch long and half an inch broad. (This, while not so large as horns sometimes are, was certainly a very respectable size for a vaginal horn; uteri have horns, vaginas have no business with them.) Found the neck of the uterus about the size of the little finger; could introduce a probe into its mouth.

In consultation with Dr. Glasgow, signs of pregnancy being present, this diagnosis was exchanged for one of ectopic pregnancy. A few days after, the tumor was removed by laparotomy and shown to this Society as an ovarian pregnancy. A short time after the operation, the abdomen was opened, when, by a careful examination, the uterus was found scarcely larger than the *end of the thumb* (uterus infantalis). The tumor, however, had evidently changed sides, as it had now gotten to the *left* of this uterus not larger than the end of the thumb, whereas, when we first made its acquaintance, it was on the *right* side. It

was certainly very uncanny in it to do this thing; but then, with such a uterus, mounted upon a neck longer than it should have been to be artistic, and ten inches from the introitus vagina, we may suppose the tumor was gyrating around from curiosity: perhaps, looking for the second horn of the vagina. Don't blame it? What business had the thing with a second horn? But then it may have been for protection, so far was it from home.

This diagnosis of ectopic pregnancy, improved and enlarged from previous ones, was certainly correct, as far as the pregnancy—the ectopic not so clear. The post-operative diagnosis of ovarian pregnancy, if correct, gave us a most rare gem, believed by many to be an impossibility; but here, placed among the things not only possible, but actually present: made undeniable by this beautiful, fascinating, overwhelmingly illustrated, demonstrated and illuminated pregnancy ovarian centralis. Gape, sinner, and swallow! Sure enough, right in the center of the ovary a home-made pregnancy had found a most fitting cavity—where such cavities are unknown—and was certainly doing well under the circumstances.

Now, let us first examine the clinical history which opened up this brilliant discovery, together with, or in connection with, well-known anatomical and physiological facts; and first, we may ask: From whence the hemorrhage? It could not have been from the rudimental or atrophied uterus, not larger than the end of the thumb. Such a uterus does not, cannot bleed; cannot furnish a hemorrhage, except from a traumatism—does not even bleed sufficient to produce the menses—such cases are amenorrhœic. Was the bleeding from the tubes? In a full-sized normal uterus, the lumen of the tube is so contracted at the uterine mouth that it will only admit the passage of a hog's bristle. Then, how small must it have been in a uterus not larger than the end of the thumb? Positively not large enough to admit the passage of a stream of blood sufficient to produce a violent hemorrhage from the vagina. Indeed, had the tubes been normal, and from any cause a hemorrhage had taken place in them, the blood must have flowed out through the abdominal os into the peritoneal cavity, or by its accumulation distended the tubes until they ruptured, when the blood would have been poured out into the abdominal cavity, intra-peritoneal, or into the

broad ligament, an extra-peritoneal hæmatocele. Then, as this blood was most positively not from or through this uterus not larger than the end of the thumb, it must have been from the pregnant tumor; and if I understand the clinical history as related, this was supposed to be its source. But as there is no connection between the ovary and vagina, or between the ovary and the uterus, through which blood could pass, if the hemorrhage was from the pregnant tumor—and it doubtless was—that tumor must have been the uterus—could have been nothing else—and we more than suspect this was the case. If so, the hemorrhage was most natural in its source, as pregnant uteri do sometimes bleed; and in such cases, the blood has an old-fashioned habit of finding its way into the vagina.

As, then, the hemorrhage could not have been from a pregnant ovary, and, in *this case*, could not have been from a tube in tubal pregnancy, through a rudimental or atrophied uterus not larger than the end of the thumb, we have an additional argument against ovariain and in favor of uterine pregnancy, and that, too, in a uterus in some way—as uteri are wont to do—connecting with the vagina, even if this has a horn.

The anatomical arguments, or facts, against this tumor being an ovary are positively demonstrable. If not, let some one tell me what business a fallopian tube has entering an ovary; what enters it for, or how? Neither a fallopian or any other tube enters an ovary. A fallopian tube does enter this tumor. Therefore, this tumor is not an ovary.

The other than anatomical arguments that this tumor presented here as an ovarian pregnancy is not such, are analogical, as there are no observed cases, no preserved specimens, in any of the pathological museums in the world, to which we might refer to learn how the ovary would conduct itself should it find itself pregnant; but this we do know: it has no accommodating property whereby its walls might enlarge—hypertrophy, grow thicker, more massive—as do those of the uterus, in correspondence with the growing ovum; and in cases of distension from a cyst or cysts within its substance, we find its walls, or its substance beween the cyst and its enclosing tunics, constantly growing correspondingly thinner with the growing cyst, until every vestige of ovarian stroma disappears, leaving only its coats to

invest the distending cyst. That it would do otherwise in distension from a growing embryo would be a monstrous suggestion! The walls in this tumor are not thinned by the distension of an ovum several times as large as a normal ovary; therefore, this pregnant tumor is not a pregnant ovary, nor an ovary at all. Then the reader must await further time to learn just how a pregnant ovary would behave itself. Sorry for this. Had hoped the St. Louis Medical Society could point the world to its discoveries and its possessions illustrating this much-mooted point—a distinction it richly deserves, as it does really produce some curious things—and, under the circumstances, this tumor, in its clinical history, its diagnosed histology, is one, and certainly not the least of its curiosities.

Then, as it is seen most positively to be not an ovarian, was it a tubal pregnancy? Here, the contradictory facts and theories of imperfect observations, and worse deductions by supposed competent observers, that obscured by cimmerian mists or misled by bog-lanterns the earlier obstetricians—thanks to the labors of late gynæcologists, principal of whom is Tait—have disappeared, giving us an illuminated highway along which a wayfaring man, though a fool, may run without stumbling, if, only, he will not run against the sign-posts.

In the case of tubal pregnancy, our analogical arguments are conclusive; while those drawn from actual observation and practice are undeniably demonstrative.

First, the walls of all hollow muscular organs are thinned by distension. This is a law to which there is no exception. Inflammation or other causes may hypertrophy—thicken—the walls of such, but distension, never: instance the gall and urinary bladders, intestines, heart, blood vessels, etc. Nor is the uterus any exception to this law; as, in a normal pregnancy, its walls ard never distended, but grow—increase by a genuine hypertrophy *pari passu*—with the growing ovum. Its function is to accommodate—furnish a suitable nidus for the development of the fecundated ovum, the growing embryo-fœtus—and, like all other organs, its anatomical structure and physiology are in correspondence with its function.

In a normal pregnancy, the uterus is as much distended at the third month, when the embryo weighs one ounce and is two or

three inches in length, as at term when the fœtus measures eighteen inches and with other contained products weighs ten or fourteen pounds. But in an abnormal pregnancy, in hydramnios, or large twins, the uterine walls may be thinned in proportion to their abnormal distension, like those of a distended bladder, even to the point of rupture.

From all analogy, then, the tubes are never thickened, but always thinned, by the distension of a growing ovum; and, in additional proof of this fact, we have the positive testimony of all observers, of all gynæcological surgeons and accoucheurs, together with the very illustrative cases that have been presented to this Society, or that may have fallen under the observation of its respective members.

In tubal pregnancy, the walls are always thinned or distended by the growing ovum, until, no longer capable of distension, they rupture; and, in the great majority of cases, long before the ovum attains the size of this one. The walls of this tumor, including their entirety—coats, muscular, mucous tissue and extravasations, all within the unstretched walls and constituting them—are half an inch or more in thickness. Therefore, this is not a tubal pregnancy. Admitting that at some points much of this thickness of the walls is made up of extravasations, in other points it is not, only thickened uterine tissue.

Furthermore, on this point we have the positive testimony of an intelligent observer, who, in this particular, may be claimed as an especial witness; one whose experience on this very point is greater than that of any other person, living or dead. Lawson Tait, after seeing and examining by operation or post-mortem seventy-six cases of tubal pregnancy, says, in his book on "Diseases of Women, and Abdominal Surgery," p. 454, edition, 1889: "The cause of primary rupture of the tube is chiefly in its *thinning* at the *placental* site." There is no thinning at the placental site in this case; therefore, this is not a tubal pregnancy. Again he continues: "When *distended*, either by pregnancy or otherwise, the *walls of the tube never thicken* materially." The walls of this pregnant tumor are thickened materially; therefore, the walls of this pregnant tumor are not the walls of the tube. Again he continues: "Certainly, in tubal pregnancy there is no imitation of the muscular walls of the uterus." In

this pregnant tumor there is a most marked imitation of the muscular walls of the uterus; therefore, the walls of this pregnant tumor are not those of a pregnant tube.

In this case, then, we may claim the most important witness the world has ever produced *as our expert*, if not a special pleader. We hope none will accuse us of having bribed Tait, or of having gotten up this case to suit Tait's views. Surely, if Tait's views in this particular case are to be received as testimony, we, the jury, are compelled to find for the defendant, which is here a *pregnant uterus*. As physician accoucheurs, whose hearts are always responsive to the wail of a defective, helpless uterus and its unfortunate possessor, lovely woman, who is often compelled to pay with her life the high prerogative of perpetuating the race of men—giving birth to *man*—a privilege which a goddess might envy—we dare not, here, to be more than a doubting Thomas; deny after we have both seen and touched.

To add to the positive proofs given this Society, by seeing and handling this *uterus defectus*, that this tumor is not a pregnant ovary or tube, would be an imposition upon your time, if not an insult to your intelligence; but let me here remark that, while the proofs as to the nature of many tumors—their histology—are microscopic, those of a pregnant uterus are macrocospic.

Not alone obstetricians and gynæcologists, but all physicians and surgeons, all of whom are, in fact, both obstetricians and gynæcologists, feel assured that they can tell a uterus, gravid or non-gravid, by seeing and handling it. To suppose they cannot do so, is not alone an insult to their intelligence, but a burlesque upon the profession. For what other purpose do they study anatomy and physiology but to learn the position, size, shape, construction and function of organs? And these make the uterus what it is, not its histology, seen by the microscope. It has no tissues not found in other parts of the body — absolutely none. Then, it is not its histology that makes it a uterus; had such been the order of nature or of Nature's God, it might as well have been of India rubber; indeed, I rather think this would have been an improvement: and, as a protection against the rampant gynæcology of the present day, I don't know but it would have been well to have encased it in elastic chain-armour.

I would not give the opinion of a committee of, say, Drs.

Mudd, Lutz, Ford, Prewitt, Tuholske, Coles, Engelmann, our lady member, Dalton, Dorsett, any three of these, as to what a pregnant tumor was, for the combined opinions of Pasteur, Virchow and Dr. Kremer—as *mere microscopists*—highlyas I may and do esteem all these ; and all the first-named, andfifty others, members of this Society, know quite enough about the microscope to cast all the microscopic light upon the tumor required.

But, then, perhaps it may not have been more concerning the pregnant tumor the microscopist was expected to throw light on than its contents. Possibly, it may have been suspected that this thing, with its strange, mystical, mythical, clinical history, might be a Colorado beetle, or a mouse. Why not? there are both beetles and mice? And if this had been a beetle, the microscopist would be at home, and would most certainly have thrown a flood of light upon it, pointing triumphantly to the histology, and demonstrating, at least, that it was not a human embryo ; or, had the object been to chase down a swarm of microbes, or bacteria, to tell us whether they had tails or were tailless, or worked in chain-gangs or isolated. No one equal to the microscopist ! Had, however, this embryo been that of a mouse, all the microscopists in the world, working as microscopists, could not have told us whether it would be developed into a god-like man, say, Bob Ingersoll, or a long-tailed rat. Why ? Because there is no histological difference, save, possibly, the blood disks in the two animals. And yet this pregnant tumor is to be determined by a microscopist. As well give a man a microscope to examine an elephant, to determine whether its great ears are not umbrella-shaped mushrooms, as to hand a doctor one to determine whether an ordinary uterine-shaped organ in the female pelvis, conducting itself as a pregnant uterus is known to do, was, indeed, a uterus, or something else ; perhaps a man-of-war.

It will be readily seen that no possible microscopic appearance of the tissues by one not an obstetrician or gynæcological surgeon, or anatomist (and the anatomist may be all that is necessary), no matter how able he may be as a microscopist or honorable as a man, is of the least value in rebuttal of such testimony as we have here. This will be manifest when it is recollected that there is no possible organic structure, no tissue, in

the uterus, not found elsewhere, the presence and arrangement of the utricular gland, perhaps, excepted ; and these do not make the uterus what it is, and that no possible amount of muscular tissue, striped or unstriped, and mucous tissue, hard or soft, nor any combination of them placed elsewhere than in or connected with the female pelvis, and having functions to perform other than those of the uterus, could possibly of themselves constitute a uterus.

To admit against the positive testimony, observation, experience and practice of such a man as Tait, backed by the unanimous experience of all physicians and surgeons, in accord with the personal knowledge and experience of each of us, testified to by our sight and touch, the statement or opinion of a mere microscopist, who, perhaps, never in his life saw a case of tubal pregnancy — indeed, in this case, is not supposed to have seen one — and this opinion, too, based upon the mere microscopic appearance or arrangement of tissues, not peculiar to any organ, would be to render all human experience nugatory, worthless, and relegate us back to the times of darkness, when God winked at the follies of men because of their ignorance.

But, if any member of this Society is disposed to waive his own knowledge and experience, together with that of the profession in general, for those of a microscopist, who finds soft tissue vascular engorgement, blood extravasations, infarctions in the walls of the uterus, where he may have expected to find only firm muscular tissue, let me assure such that the uterine walls are not composed of firm muscular tissue, but often of a tissue so soft that the uterine sound has been passed quite through them and out into the cavity of the abdomen, without the operator having used undue force or suspecting what had happened ; and this, too, by gynæcologists of experience, and who could not be classed with the stolid or ignorant.

Snom Beck, a great authority, quoted by obstetrical authors, from Hodge to Playfair, in the last edition, 1889, says : "The mucous membrane of the uterus one-third of its thickness is not a mucous membrane, but a softened *portion of true uterine tissue.*"

Dr. John Williams, of London, a great authority, quoted also by Playfair in the last edition of his Obstetrics, 1889, says that the *greater portion* of the uterine walls are composed of

this *anomalous* uterine tissue. Then, in anomalous cases of this *anomalus* uterine tissue, thought to compose the greater portion of the normal uterine walls, why may we not admit the possibility of tissue of much the appearance of this, with semi-organized blood extravasation? Surely, such conditions of the walls of a pregnant uterus are not unique, and would certainly be no evidence that the pregnant tumor was not the uterus; but, on the contrary, evidence that it was — not, it is true, a normal condition in a normal uterus; but then, unfortunately, it is not always a normal condition, or a normal uterus, with which the obstetrician or gynæological surgeon has to deal. And, yet, we may readily suppose one not an obstetrician—a mere microscopist—might mistake this condition for something else—perhaps a Bologna sausage.

Now, as it is perfectly manifest that this tumor is a pregnant uterus, let us see if we cannot determine what kind of a uterus it was; and this we are the more anxious to do, that we may show that Dr. C.'s surgical blunder was not so great a blunder, after all. It was a condition requiring surgical interference, and he did perfectly right in removing it; without this, it might have ruptured and killed the woman — its rupture would not have been from distention, as in the case of a tube, but, from its rudimental development — it was utterly unfitted for the function it had to perform; and hence, infarctions, extravasations in its walls, and hemorrhage through the vagina, as in uterine hemorrhage, the undeveloped pregnant horn of a uterus bicornis ora uterus didelphys. All this his examination fully determined, had he been able to interpret the facts correctly.

It was not, then, that he did not discover the true condition, but that, from its very great rarity, he most naturally misinterpreted what he found. Would any of us have done better? Let us see. The condition and perplexity he met with in the upper part of the vagina — blind sacs and obscure openings — were caused by the septem often present in such cases. The long, narrow neck may have been common to the two horns, and the small uterus, not larger than the end of his thumb, was the other undeveloped horn of a rudimental uterus; while the tumor removed, was the pregnant horn, which, on account of its rudimental condition, was unable to equally develop with the growing ovum. Perhaps, had he mentally removed the

horn from the vagina where it was out of place, and stuck it on to the uterus, where such things belong, it would have furnished him the key to a correct diagnosis.

I have treated his clinical history of the case in the manner I have, to show that, without an alphabet for its proper interpretation, it is confused, obscure, contradictory, misleading; but, with its proper understanding, entirely correct, instructing us as to the true condition — indeed, absolutely proven by the interpretation we have given; and also to show how utterly worthless are clinical histories, if misinterpreted, misapplied — how illustrative, when understood. As utterly contradictory, impossible, misleading as it is, when applied to ovarian or tubal pregnancy, when placed with a uterus bicornis or didelphys, it is in perfect harmony with itself and the conditions, enabling us to determine *a priori* from the cause to the effect, next *a posteriori* from effects to the cause, exactly what the conditions were.

For one, then, I thank Dr. C. for the presentation of this case, and indorse his removal of the tumor, not in the manner of its removal, but with the best interpretation he was able to give the seemingly contradictory symptoms and anomalous conditions, in the only manner he could have done. Would any of us have done better? I doubt it.

Now, let me point you to these plates, illustrating these conditions and this case.

We have here a diagram of the fœtus in the fourth or fifth week. We find on either side of the spinal column the Wolffian bodies, and between this and the spinal column you have two kinds of bodies. On each side of the Wolffian bodies we have the Wolffian ducts, which empty into the sinus urogenitalis, and on the outer side of these we have the filament of Mueller — the ducts of Mueller. This fœtus is now asexual — it may be either a male or a female; but, if it be a female, we find these filaments of Mueller becoming hollow, until absorption takes place in the interior, and they become hollow tubes, and form the fallopian tubes. In the next diagram, we have these ducts of Mueller uniting with each other at the lower third and forming the uterus, and the septum extends down through the entire uterus and vagina; there are two of them. That is always formed in every human female; at first, she has two uteri and

two vaginæ, but, afterwards, the septum is absorbed, and she has a single vagina and a single uterus. This condition is what is found in the carnivora — the cat and panther. Then, the uterus is not perfect in its fundus, but there is a depression left, and it is only in the higher forms of animals — the ape and the gorilla — that we have the uterus shaped as this is, with a large rounded fundus. In the lower forms of human females, the uterus still retains this slight depression. It is only the higher forms of humanity — in the Caucassian race — that we find the perfect human uterus. Now, we have a uterus here that carries us back through untold æons to the non-placental epoch. This is the uterus of the marsupials — the kangaroo; this is the uterus of the opossum to-day. This is the uterus of a woman who bore a number of children. There is simply an arrest of development. There is nothing that more conclusively proves the evolution of man from animals than this uterus. There is no doubt that there was a time when this uterus was the most perfect type of sexual development. The woman who had this uterus died at forty years of age, after giving birth to a number of children. She sometimes conceived in one uterus, and, during the pregnancy, menstruated from the other. Sometimes she conceived in one uterus at one time, and in the other at another time; and gave birth to a child at full term from one uterus, and an embryo, perhaps only three or four months old, from the other.

The next diagram represents a uterus bicornis. This uterus is simply an arrest of development. The tubes never united to form the fundus of the uterus. The corpus uterus was left partially separated, by a failure of the tubes to unite at their apex; that is, in this case, absorption did not take place at all, so this patient had two uteri and two vaginæ. This diagram is from a very interesting case. The patient was thirty years of age, and Dr. Mai, a distinguished obstetrician, a professor at Breslau, was in attendance on the case when the patient was in labor, and, upon complications or difficulties arising, he called in consultation Dr. Fischer, another distinguished professor, of the same place. Fischer stuck his finger into this side of the uterus, and decided that the patient was not in labor, and was not even pregnant. Dr. Mai stuck his finger into the other vagina, and remarked that things were progressing all right,

that the presentation was all right, but it was a tedious labor. Dr. Fischer remarked that Mai must be a fool to say the patient was in labor. Mai told Fischer that he certainly was a fool, if he did not know that the patient was in labor. Then Fischer stuck his finger into Mai's vagina, and said the patient was in labor; but there had been a wonderful change since he examined her a few minutes before. Mai examined the patient again, and got his finger into Fischer's vagina, and then he was amazed to find the change that had occurred; so they had a violent quarrel. Meanwhile, the uterus kept at work.

On this other plate, we have a uterus bicornis, but with an atrophied horn, and this atrophied horn was pregnant, and, you see very readily, that this horn was separated by an inch and a half from the more developed horn. The patient had conceived, and, at term, fell into natural labor, and was in labor three or four days, when the labor pains ceased, and she got up and went about, and continued to do so for five or six months. She died of phthisis pulmonalis, and, after death, the fœtus was removed, and the condition of the uterus discovered.

This other is the uterus of a lady, in New York, who was under the care of a distinguished gynæcologist, one of great experience. The patient was suffering with obstruction of the bowel; something was pressing on the rectum. On introducing the finger into the rectum, this tumor was found pressing the rectum against the os sacrum; and as the patient's suffering was very great during the menstrual period, it was determined to remove her ovaries and fallopian tubes, and that was done on this side; as you see, it is quite smooth. And after they had removed the fallopian tube and ovary on one side, they looked for the ovary on the other side, but did not find it; but, after considerable investigation, they found this other horn of the uterus prolapsed, retroverted; it was a uterus bicornis, and this horn was low down in the pelvis. They lifted it up, and removed the ovary and tube on that side, also, and the patient got along without any accident Our pregnant tumor was, most likely, an atrophied horn like this.